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June 1, 2004

Mr. Don Pettit
Oregon Department of Environmental Quality
2020 SW Fourth Ave., Suite 400
Portland, OR 97201

**Re: Groundwater Monitoring/Project Status Update Report
First Quarter 2004
Kinder Morgan Liquid Terminals, LLC
Linnton Terminal
Portland, Oregon
DEQ No. WPMVC-WMCVC-NWR-00-17
Delta Project No. PTKM-001-4**

Dear Mr. Pettit:

Delta Environmental Consultants, Inc. (Delta) has prepared this groundwater monitoring/project status update report on behalf of Kinder Morgan Liquid Terminals, LLC (KMLT) for the KMLT Linnton Terminal located at 11400 NW St. Helens Road in Portland, Oregon (Figure 1). Quarterly groundwater monitoring is currently being conducted at the site in accordance with the Remedial Investigation (RI) Work Plan dated February 2002. Field procedures were performed in accordance with Delta's standard operating procedures for quality assurance and quality control (QA/QC).

SCOPE OF WORK

The following scope of work was conducted as part of the first quarter 2004 groundwater monitoring and sampling event.

- On January 29 and 30, 2004, 32 groundwater monitoring wells and piezometers were monitored, and 13 wells were sampled.
- Monthly separate phase hydrocarbon (SPH) recovery was performed on each well containing SPH during the reporting period.

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In addition to this scope of work, the following activities were also completed during the reporting period:

- Changed out absorbent booms as needed during January, February and March, 2004 to address the petroleum hydrocarbon seep.
- Selected a subcontractor for the installation of the IRAM system.
- Conducted a preconstruction meeting with the selected subcontractor.
- Obtained access agreement with the Portland & Western Railroad for further investigation of SPH occurrence in the vicinity of Well MW-16.

METHODS AND PROCEDURES

Groundwater monitoring field activities conducted on January 29 and 30, 2004 consisted of collecting water level measurements in Wells MW-1 through MW-22, P-1 through P-5 and RW-1 through RW-5 as well as measuring parameters and collecting samples from Wells MW-4 through MW-9, MW-12 through MW-15, MW-17, MW-18 and MW-22.

The approximate site boundaries, site structures, and the approximate locations of the monitoring wells are presented in Figure 2. The parameters measured in the wells consisted of water level measurements, pH, specific conductance, and temperature. The static water levels were measured in Wells MW-1 through MW-10, MW-12 through MW-22, P-1 through P-5 and RW-1 through RW-5 on January 29, 2004. A depth-to-water measurement could not be attained from Well MW-11 due to the fouling of the probe by the relatively high viscosity SPH layer in that well. Water level measurements were obtained by slowly lowering an electronic water level indicator into the well until the instrument indicated that the groundwater surface had been encountered. The measurement was made from a location permanently marked on the top of the casing to within the nearest 0.01 foot. If SPH was present in any of the monitoring wells, the thickness of the layer was measured and recorded. Each water level measurement was repeated at least once to verify the accuracy of the initial measurement.

All measurements were recorded on field sampling forms (Attachment A). Prior to collecting groundwater samples, each monitoring well to be sampled was purged of at least three casing volumes of water. All 13 wells sampled were purged using clean, disposable bailers and new nylon cord or using a centrifugal pump with disposal tubing. Prior to sampling, the wells were allowed to recover to approximately 80% or more of static water level. A total volume of approximately 98 gallons of water was purged from the wells.

After purging each monitoring well, groundwater samples were collected using new disposable bailers. The water samples were placed in laboratory-prepared containers and each sample was appropriately labeled so as to identify the sample number, project name, facility number, the date and time of sample collection, and the sampler's name. Each sample was immediately placed in a chilled cooler for storage, and samples were transported to the laboratory using strict chain-of-custody protocols.

ANALYTICAL METHODS

Collected groundwater samples were submitted to North Creek Analytical of Beaverton, Oregon on January 30, 2004 and analyzed for the following:

- Gasoline range hydrocarbons (TPH-Gx) by NW TPH-Gx Method.
- Diesel and heavy oil range hydrocarbons (TPH-Dx) by NW TPH-Dx Method.
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by Environmental Protection Agency (EPA) Method 8021B.
- Polyaromatic hydrocarbons (PAHs) by EPA Method 8270M-SIM.
- Total metals by EPA 6000/7000 Series Methods.

RESULTS OF QUARTERLY MONITORING

Groundwater Elevation and Flow

Depth to groundwater in the measured wells ranged from 9.23 feet below top of casing in Well MW-16 to 19.37 feet below top of casing in Well RW-2. SPH was measured in fourteen wells during the fourth quarter monitoring event (MW-1, MW-2, MW-3, MW-10, MW-11, MW-19, MW-20, MW-21, P-4 and RW-1 through RW-5). SPH ranged from 0.1 foot in Well MW-1 to 6.10 feet in Well RW-1. The current and historic groundwater elevation data have been summarized in Table 1.

Based on the groundwater level measurements taken during this monitoring event, the groundwater flow direction appears to be generally to the northeast, toward the Willamette River. Generally, the groundwater flow direction is consistent with those of past monitoring events. Figure 2 illustrates the current approximate water level elevation contours and gradient.

Groundwater Analytical Results

Benzene was detected above the laboratory method reporting limit (MRL) in six wells at concentrations ranging from 2.05 micrograms per liter ($\mu\text{g}/\text{L}$) in Well MW-12 to 53.7 $\mu\text{g}/\text{L}$ in Well MW-6. Toluene, ethyl benzene, and xylene concentrations are generally consistent with the past monitoring events.

PAHs were detected above the laboratory MRL in nine wells at concentrations ranging from 0.105 $\mu\text{g}/\text{L}$ of chrysene in Well MW-14 to 32.1 $\mu\text{g}/\text{L}$ of acenaphthene in Well MW-8. With the exception of the chrysene detection in Well MW-14, the detected PAH concentrations are generally similar to past analytical results. The detection of chrysene in Well MW-14 is the first time a PAH concentration has been detected in this well. A summary of the PAH analytical results is presented in Table 3.

Concentrations of TPH as gasoline were detected above laboratory MRLs in seven of the 13 sampled wells, ranging from 81.7 $\mu\text{g}/\text{L}$ in MW-4 to 3,390 $\mu\text{g}/\text{L}$ in Well MW-13. Concentrations of TPH as diesel were detected above laboratory MRLs in eight of the

sampled wells, ranging from 693 µg/L in Well MW-9 to 82,600 µg/L in Well MW-4. TPH as heavy oil was not detected above the laboratory MRL in any of the samples. The laboratory analytical results for TPH are presented in Table 2.

Concentrations of total metals were detected above the laboratory MRL in all 13 sampled wells. Concentrations ranged from 0.00105 mg/L of chromium in Well MW-22 to 0.237 mg/L of zinc in Well MW-13. The total metal concentrations were typical of previous sampling events. The analytical results for metals are presented in Table 4.

Based on a review of the laboratory reports, it appears that the submitted water samples were analyzed within the specified holding times, and that the appropriate QA/QC procedures were followed during analysis. A summary of the laboratory analytical results is presented in Tables 2, 3 and 4. A complete copy of the laboratory report and chain-of-custody documentation is included in Attachment B.

Monthly SPH Recovery

Manual bailing of SPH was conducted at the site once a month during January, February and March 2004. SPH bailing was conducted on the following wells: MW-1, MW-2, MW-3, MW-10, MW-11, MW-19, MW-20, MW-21 and RW-1 through RW-5. A total of 121 gallons of SPH was recovered during the first quarter of 2004. Table 1 shows the amount of SPH bailed from each well over the three-month period (first quarter).

ACTIVITIES SCHEDULED FOR THE FIRST QUARTER OF 2004

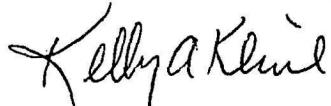
- Perform monthly SPH removal from wells that have historically contained SPH.
- Sample selected monitoring wells during the April 2004 sampling event (second quarter event).
- Perform weekly inspections of the containment booms in the seep area.
- Install IRAM area containment system to address seep area.
- Conduct further characterization activities in the vicinity of well MW-16.

CONCLUSIONS

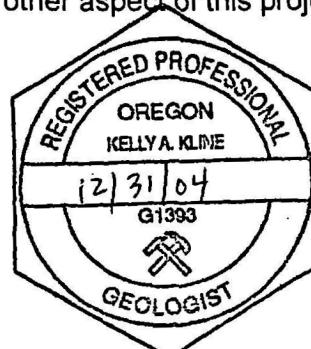
Groundwater will continue to be monitored on a quarterly basis. The next sampling event will be conducted during the second quarter 2004.

Please contact Mr. Steve Osborn of KMLT at (707) 249-1633 or the undersigned if you have any questions regarding this report or any other aspect of this project.

Sincerely,
Delta Environmental Consultants, Inc.



Kelly A. Kline, R.G.
Senior Geologist



Attachments: Table 1 - Groundwater Elevation and SPH Data
Table 2 - Groundwater Sample Analytical Results- TPH, BTEX-N
Table 3 - Groundwater Sample Analytical Results- PAHs
Table 4 - Groundwater Sample Analytical Results- Total Metals
Figure 1 - Site Location Map
Figure 2 - Groundwater Elevation Contours and SPH Thickness

Attachment A - Field Forms
Attachment B - Certified Analytical Reports and Chain-of-Custody Documentation

cc: Mr. Steve Osborn, KMEP
Ms. Jeni Crawley, KMEP (file copy)

TABLE 1
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
 Kinder Morgan Liquid Terminals LLC
 Linnton Terminal
 Portland, Oregon

Well Identification (TOC)	Date Gauged	Depth to Water (ft)	Depth to SPH (ft)	SPH Thickness (ft)	Groundwater Elevation ¹ (ft)	SPH	Recovered by Quarter
							Quarter (gallons)
MW-1 (27.98)	02/01/02	13.34	13.34	sheen	14.64	-	
	04/24/02	13.26	13.26	sheen	14.72	-	
	07/29/02	15.82	15.80	0.02	12.18	0.41	
	10/29/02	18.41	18.40	0.01	9.58	-	
	11/26/02*	17.91	17.81	0.10	10.15	-	
	12/30/02	15.63	15.63	sheen	0.01	0.56	
	01/28/03	15.15	NP	0.00	12.83	0.00	
	04/29/03	13.15	NP	0.00	14.83	0.00	
	07/29/03 ²	16.31	16.31	sheen	11.67	0.60	
	10/28/03	17.35	17.18	0.17	10.63		
	01/29/04	13.30	13.20	0.10	14.76	1.80	
MW-2 (28.47)	01/29/02	14.27	13.60	0.67	14.74	2.50	
	04/24/02	13.96	13.37	0.59	14.98	0.55	
	07/29/02	16.50	16.16	0.34	12.24	1.20	
	10/29/02	18.93	18.92	0.01	9.55	1.30	
	11/26/02*	18.82	18.52	0.30	9.89	-	
	12/30/02	16.81	16.33	0.48	12.04	-	
	01/28/03	16.04	15.70	0.34	12.70	0.65	
	04/29/03	13.81	13.27	0.54	15.09	1.10	
	07/29/03	17.23	16.92	0.31	11.49	5.00	
	10/28/03	19.53	17.58	1.95	10.50		
	01/29/04	14.48	13.31	1.17	14.93	4.20	
MW-3 (28.97)	01/29/02	13.04	12.86	0.18	16.07	0.25	
	04/24/02	13.11	13.00	0.11	15.95	0.40	
	07/29/02	14.69	14.42	0.27	14.50	0.55	
	10/29/02	16.11	NP	Sheen	12.86	0.51	
	11/26/02*	16.08	15.72	0.36	13.18	-	
	01/28/03	14.15	14.07	0.08	14.88	0.35	
	04/29/03	12.75	12.71	0.04	16.25	0.45	
	07/29/03	15.03	14.83	0.20	14.10	1.05	
	10/28/03	15.58	15.51	0.07	13.45		
	01/29/04	12.87	12.84	0.03	16.12	0.20	
MW-4 (32.88)	02/01/02	17.74	NP	0.00	15.14	-	
	04/24/02	17.49	NP	0.00	15.39	-	
	07/29/02	20.19	NP	0.00	12.69	-	
	10/29/02	22.72	NP	0.00	10.16	-	
	01/28/03	19.82	NP	0.00	13.06	-	
	04/29/03	17.29	NP	0.00	15.59	-	
	07/29/03	20.54	NP	0.00	12.34	-	
	10/28/03	21.67	NP	0.00	11.21	-	
	01/29/04	17.71	NP	0.00	15.17	-	

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Well Identification (TOC)	Date Gauged	Depth to Water (ft)	SPH Thickness (ft)	Groundwater Elevation ¹ (ft)	Recovered by Quarter (gallons)
MW-5 (40.08)	01/31/02	21.73	NP	0.00	18.35
	04/24/02	21.76	NP	0.00	18.32
	07/29/02	23.87	NP	0.00	16.21
	10/29/02	DRY	NP	0.00	DRY
	01/28/03	23.81	NP	0.00	16.27
	04/29/03	20.95	NP	0.00	19.13
	07/29/03	24.46	NP	0.00	15.62
	10/28/03	DRY	NP	0.00	DRY
	01/29/04	21.91	NP	0.00	18.17
MW-6 (36.93)	02/01/02	16.77	NP	0.00	20.16
	04/24/02	17.82	NP	0.00	19.11
	07/29/02	20.85	NP	0.00	16.08
	10/29/02	21.51	NP	0.00	15.42
	01/28/03	19.72	NP	0.00	17.21
	04/29/03	15.88	NP	0.00	21.05
	07/29/03	DRY	NP	0.00	DRY
	10/28/03	21.61	NP	0.00	15.32
	01/29/04	16.59	NP	0.00	20.34
MW-7 (32.26)	01/31/02	17.74	NP	0.00	14.52
	04/24/02	17.81	NP	0.00	14.45
	07/29/02	20.06	NP	0.00	12.20
	10/29/02	22.40	NP	0.00	9.86
	01/28/03	19.02	NP	0.00	13.24
	04/29/03	16.23	NP	0.00	16.03
	07/29/03	20.52	NP	0.00	11.74
	10/28/03	21.41	NP	0.00	10.85
	01/29/04	16.49	NP	0.00	15.77
MW-8 (30.06)	02/01/02	17.01	NP	0.00	13.05
	04/24/02	16.58	NP	0.00	13.48
	07/29/02	19.32	NP	0.00	10.74
	10/29/02	20.83	NP	0.00	9.23
	01/28/03	18.47	NP	0.00	11.59
	04/29/03	16.93	NP	0.00	13.13
	07/29/03	20.06	NP	0.00	10.00
	10/28/03	20.43	NP	0.00	9.63
	01/29/04	17.00	NP	0.00	13.06

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Well Identification (TOC)	Date Gauged	Depth to Water (ft)	Depth to SPH (ft)	SPH Thickness (ft)	Groundwater Elevation ¹ (ft)	Recovered by Quarter (gallons)
MW-9 (30.45)	02/01/02	15.25	NP	0.00	15.20	-
	04/24/02	15.49	NP	0.00	14.96	-
	07/29/02	16.71	NP	0.00	13.74	-
	10/29/02	18.77	NP	0.00	11.68	-
	01/28/03	16.35	NP	0.00	14.10	-
	04/29/03	14.31	NP	0.00	16.14	-
	07/29/03	17.55	NP	0.00	12.90	-
	10/28/03	18.44	NP	0.00	12.01	-
	01/29/04	14.67	NP	0.00	15.78	-
MW-10 (30.32)	02/01/02	11.84	NP	0.00	18.48	-
	04/24/02	14.00	NP	0.00	16.32	-
	07/29/02	18.08	17.03	1.05	13.08	0.50
	10/29/02	20.86	20.72	0.14	9.57	0.13
	11/26/02*	19.82	19.81	0.01	10.51	-
	01/28/03	13.84	13.61	0.23	16.66	0.20
	04/29/03	14.36	NP	0.00	15.96	0.01
	07/29/03	18.51	NP	0.00	11.81	0.01
	10/28/03	18.28	NP	0.00	12.04	
	01/29/04	12.59	12.28	0.31	17.98	0.40
MW-11 (35.03)	01/29/02	19.06	NP	0.00	15.97	0.17
	04/24/02	18.91	18.48	0.43	16.46	0.25
	07/29/02	22.02	20.75	1.27	14.03	0.95
	10/29/02	25.50	23.20	2.30	11.37	1.95
	11/26/02*	25.10	23.05	2.05	11.57	-
	01/28/03	21.00	20.65	0.35	14.31	0.45
	04/29/03	20.06	18.55	1.51	16.18	0.60
	07/29/03	-	21.15	>3.0	-	0.65
	10/28/03	-	22.30	-	-	
	01/29/04	-	18.99	-	-	0.40
MW-12 (34.03)	01/31/02	14.85	NP	0.00	19.18	-
	04/24/02	15.32	NP	0.00	18.71	-
	07/29/02	16.77	NP	0.00	17.26	-
	10/29/02	17.99	NP	0.00	16.04	-
	01/28/03	16.21	NP	0.00	17.82	-
	04/29/03	14.99	NP	0.00	19.04	-
	07/29/03	16.56	NP	0.00	17.47	-
	10/28/03	17.61	17.60	0.01	16.43	-
	01/29/04	14.98	NP	0.00	19.05	-

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Well Identification (TOC)	Date Gauged	Depth to Water (ft)	Depth to SPH (ft)	SPH Thickness (ft)	Groundwater Elevation ¹ (ft)	Recovered by Quarter (gallons)
MW-13 (35.81)	01/31/02	17.67	NP	0.00	18.14	-
	04/24/02	18.35	NP	0.00	17.46	-
	07/29/02	19.35	NP	0.00	16.46	-
	10/29/02	25.42	NP	0.00	10.39	-
	01/28/03	20.52	NP	0.00	15.29	-
	04/29/03	17.41	NP	0.00	18.40	-
	07/29/03	21.47	NP	0.00	14.34	-
	10/28/03	24.25	NP	0.00	11.56	-
	01/29/04	17.97	NP	0.00	17.84	-
MW-14 (36.54)	01/31/02	17.71	NP	0.00	18.83	-
	04/24/02	18.42	NP	0.00	18.12	-
	07/29/02	21.47	NP	0.00	15.07	-
	10/29/02	23.99	NP	0.00	12.55	-
	01/28/03	20.62	NP	0.00	15.92	-
	04/29/03	16.91	NP	0.00	19.63	-
	07/29/03	22.26	NP	0.00	14.28	-
	10/28/03	23.68	NP	0.00	12.86	-
	01/29/04	17.79	NP	0.00	18.75	-
MW-15 (37.15)	01/31/02	15.12	NP	0.00	22.03	-
	04/24/02	16.13	NP	0.00	21.02	-
	07/29/02	19.93	NP	0.00	17.22	-
	10/29/02	22.59	NP	0.00	14.56	-
	01/28/03	18.26	NP	0.00	18.89	-
	04/29/03	14.28	NP	0.00	22.87	-
	07/29/03	20.63	NP	0.00	16.52	-
	10/28/03	22.41	NP	0.00	14.74	-
	01/29/04	14.80	NP	0.00	22.35	-
MW-16 (38.95)	01/31/02	8.91	NP	0.00	30.04	-
	04/24/02	11.04	NP	0.00	27.91	-
	07/29/02	11.93	NP	0.00	27.02	-
	10/29/02	12.85	12.75	0.10	26.18	0.11
	11/26/02*	12.05	12.00	0.05	26.94	-
	01/28/03	10.11	NP	0.00	28.84	-
	04/29/03	9.85	NP	0.00	29.10	-
	07/29/03	12.14	NP	0.00	26.81	-
	10/28/03	11.83	NP	0.00	27.12	-
	01/29/04	9.23	NP	0.00	29.72	-
MW-17 (36.57)	01/31/02	16.93	NP	0.00	19.64	-
	04/24/02	17.83	NP	0.00	18.74	-
	07/29/02	20.83	NP	0.00	15.74	-
	10/29/02	23.38	NP	0.00	13.19	-
	01/28/03	19.87	NP	0.00	16.70	-
	04/29/03	16.04	NP	0.00	20.53	-
	07/29/03	21.59	NP	0.00	14.98	-
	10/28/03	23.15	NP	0.00	13.42	-
	01/29/04	16.16	NP	0.00	20.41	-

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Linnton Terminal
Portland, Oregon

Well Identification (TOC)	Date Gauged	Depth to Water (ft)	Depth to SPH (ft)	SPH Thickness (ft)	Groundwater Elevation ¹ (ft)	Recovered by Quarter (gallons)
MW-18 (36.66)	04/24/02	19.41	NP	0.00	17.25	-
	07/30/02	22.21	NP	0.00	14.45	-
	10/29/02	24.71	NP	0.00	11.95	-
	01/28/03	21.20	NP	0.00	15.46	-
	04/29/03	17.85	NP	0.00	18.81	-
	07/29/03	23.02	NP	0.00	13.64	-
	10/28/03	24.28	NP	0.00	12.38	-
	01/29/04	18.45	NP	0.00	18.21	-
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MW-19 (30.34)	04/29/03	14.88	14.80	0.08	15.52	3.00
	07/29/03	19.75	17.94	1.81	12.04	8.50
	10/28/03	20.08	18.88	1.20	11.22	
	01/29/04	13.71	13.47	0.24	16.82	1.65
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MW-20 (30.25)	04/29/03	13.42	NP	0.00	16.83	-
	07/29/03	18.26	NP	0.00	11.99	-
	10/28/03	19.60	19.49	0.11	10.74	
	01/29/04	13.75	12.42	1.33	17.56	4.75
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MW-21 (30.62)	04/29/03	8.12	NP	0.00	22.50	-
	07/29/03	17.02	NP	0.00	13.60	-
	10/28/03	18.62	18.36	0.26	12.21	
	01/29/04	9.98	9.78	0.20	20.80	1.00
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MW-22 (30.19)	04/29/03	15.61	NP	0.00	14.58	-
	07/29/03	19.75	NP	0.00	10.44	-
	10/28/03	20.33	NP	0.00	9.86	-
	01/29/04	14.88	NP	0.00	15.31	-
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P-1 (37.89)	01/31/02	-	NP	0.00	-	-
	04/24/02	19.31	NP	0.00	18.58	-
	07/30/02	19.72	NP	0.00	18.17	-
	10/29/02	Unable to Locate				
	01/28/03	19.67	NP	0.00	18.22	-
	04/29/03	17.71	NP	0.00	20.18	-
	07/29/03	19.94	NP	0.00	17.95	-
	10/28/03	19.97	NP	0.00	17.92	-
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 Linnton Terminal
 Portland, Oregon

Well Identification (TOC)	Date Gauged	Depth to Water (ft)	Depth to SPH (ft)	SPH Thickness (ft)	Groundwater Elevation ¹ (ft)	Recovered by Quarter (gallons)
P-2 (36.54)	01/31/02	-	NP	0.00	-	-
	04/24/02	13.99	NP	0.00	22.55	-
	07/30/02	15.55	NP	0.00	20.99	-
	10/29/02	16.52	NP	0.00	20.02	-
	01/28/03	14.66	NP	0.00	21.88	-
	04/29/03	12.98	NP	0.00	23.56	-
	07/29/03	15.10	NP	0.00	21.44	-
	10/28/03	11.15	NP	0.00	25.39	-
	01/29/04	13.00	NP	0.00	23.54	-
P-3 (33.53)	01/29/02	16.93	NP	0.00	16.60	-
	04/24/02	17.58	NP	0.00	15.95	-
	07/30/02	18.90	NP	0.00	14.63	-
	10/29/02	19.68	NP	0.00	13.85	-
	01/28/03	18.16	NP	0.00	15.37	-
	04/29/03	17.29	NP	0.00	16.24	-
	07/29/03	18.81	NP	0.00	14.72	-
	10/28/03	19.26	NP	0.00	14.27	-
	01/29/04	17.24	NP	0.00	16.29	-
P-4 (31.75)	01/29/02	16.60	NP	0.00	15.15	-
	04/24/02	15.91	NP	0.00	15.84	-
	07/30/02	17.18	16.90	0.28	14.79	-
	10/29/02	22.26	NP	0.00	DRY	-
	01/28/03	18.08	17.98	0.10	13.75	-
	04/29/03	15.55	NP	0.00	16.20	-
	07/29/03	18.73	NP	0.00	13.02	-
	10/28/03	19.48	19.40	0.08	12.33	-
	01/29/04	16.99	16.87	0.12	14.86	-
P-5 (29.75)	01/29/02	14.41	NP	0.00	15.34	-
	04/24/02	14.40	NP	0.00	15.35	-
	07/30/02	16.35	16.31	0.04	13.43	-
	10/29/02	18.09	18.17	0.08	11.72	-
	01/28/03	14.96	14.95	0.01	14.80	-
	04/29/03	14.61	14.60	0.01	15.15	-
	07/29/03	19.98	17.96	2.02	11.39	-
	10/28/03	18.48	18.15	0.33	11.53	-
	01/29/04	14.00	NP	0.00	15.75	-
RW-1 (28.66)	10/30/02	19.36	NP	0.00	9.30	0.65
	11/26/02*	18.92	18.58	0.34	10.01	-
	01/28/03	16.19	15.94	0.25	12.67	1.65
	04/29/03	14.13	13.67	0.46	14.90	1.05
	07/29/03	18.70	17.04	1.66	11.29	9.00
	10/28/03	18.70	17.80	0.90	10.68	
	01/29/04	19.20	13.10	6.10	14.34	27.00

TABLE 1
GROUNDWATER ELEVATION AND SPH RECOVERY DATA
 Kinder Morgan Liquid Terminals LLC
 Linnton Terminal
 Portland, Oregon

Well Identification (TOC)	Date Gauged	Depth to Water (ft)	Depth to SPH (ft)	SPH Thickness (ft)	Groundwater Elevation ¹ (ft)	Recovered by Quarter (gallons)
RW-2 (28.97)	10/30/02	19.48	NP	0.00	9.49	0.90
	11/26/02*	18.93	18.82	0.11	10.13	-
	01/28/03	19.77	15.86	3.91	12.33	17.25
	04/29/03	17.36	13.73	3.63	14.51	6.75
	07/29/03	19.54	17.23	2.31	11.28	9.00
	10/28/03	18.47	18.23	0.24	10.69	
	01/29/04	19.37	13.57	5.80	14.24	33.00
RW-3 (29.23)	10/30/02	22.11	19.50	2.61	9.21	13.50
	11/26/02*	22.96	18.81	4.15	9.59	-
	01/28/03	22.58	15.98	6.60	11.93	30.00
	04/29/03	18.11	13.97	4.14	14.43	18.50
	07/29/03	19.63	16.66	2.97	11.98	8.25
	10/28/03	19.03	18.49	0.54	10.63	
	01/29/04	18.33	14.03	4.30	14.34	29.00
RW-4 (29.69)	10/30/02	20.27	NP	0.00	9.42	-
	01/28/03	18.00	16.58	1.42	12.83	7.50
	04/29/03	16.96	14.59	2.37	14.63	6.50
	07/29/03	18.76	18.50	0.26	11.14	0.70
	10/28/03	18.98	NP	0.00	10.71	
	01/29/04	17.90	14.07	3.83	14.85	13.00
RW-5 (29.83)	10/30/02	20.32	NP	0.00	9.51	0.01
	01/28/03	15.95	NP	Sheen	13.88	0.05
	04/29/03	15.31	NP	Sheen	14.52	0.25
	07/29/03	19.17	19.10	0.07	10.72	0.10
	10/28/03	19.38	19.36	0.02	10.47	
	01/29/04	15.41	14.50	0.91	15.15	4.50

NOTES:

NP = No Measurable Product

¹ = Elevation relative to 1988 North American Vertical Datum (NAVD)

² = Not Sampled. Sheen observed during gauging. SPH measured after purging at 0.05 ft. thickness.

- = Not measured, not analyzed, not sampled or not applicable

Groundwater elevations corrected for product thickness using formula:

GWE = TOC - DTW - (0.8 x (DTW - DTP)) where 0.8 is the density of the SPH

* = Additional RI Sampling

TABLE 2
GROUNDWATER ANALYTICAL RESULTS - TPH BTEX
 Kinder Morgan Liquid Terminals LLC
 Linnton Terminal
 Portland, Oregon

Sample ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylene (total) (µg/L)	Naph- thalene (µg/L)	Gasoline (µg/L)	Diesel (µg/L)	Heavy Oil (µg/L)
MW-1	02/01/02	2.50 U	2.50 U	2.50 U	5.00 U	31.5	2,610	NA	NA
	11/26/02*	1.00 U	1.00 U	1.00 U	3.00 U	2.00 U	797	30,000	3,700
	01/29/03	1.00 M	1.00 M	1.00 M	2.00 M	20.0 M	3,610	118,000	13,700
	04/30/03	0.500 M	0.500 M	0.500 M	1.00 M	2.00 M	1,390	129,000	14,100
MW-2	11/26/02*	1.00 U	1.00 U	1.00 U	3.00 U	23.3	1,350	148,000	14,100
MW-3	11/26/02*	1.00 U	1.00 U	1.00 U	3.00 U	2.31	1,280	198,000	500 U
MW-4	02/01/02	0.500 U	0.500 U	0.500 U	1.00 M	2.00 U	884	NA	NA
	05/01/02	2.50 U	2.50 U	2.50 U	5.00 U	31.5 J	2,610	NA	NA
	07/29/02	0.500 M	0.500 M	0.500 M	1.00 M	0.500 M	169	12,600	500 M
	10/30/02	0.500 M	0.500 M	0.500 M	1.00 M	3.50 M	479	33,000	500 M
DUP	10/30/02	0.500 M	0.500 M	0.500 M	1.00 M	2.00 M	535	2,480	500 M
	01/29/03	0.500 M	0.500 M	0.500 M	1.00 M	1.20 M	326	16,900	500 M
	04/30/03	0.500 M	0.500 M	0.500 M	1.00 M	2.50 M	119	10,800	500 M
	07/29/03	0.500 M	0.504	0.764	4.39	NA	125	50,100	2,500 M
	10/28/03	0.500 M	0.757	0.500 M	2.51	NA	1,180	120,000	10,000 M
	01/30/04	0.500 M	0.500 M	0.500 M	1.00 M	NA	81.7	82,600	1,000 M
MW-5	02/01/02	0.500 U	0.500 U	0.500 U	1.00 U	2.00 U	80.0 U	NA	NA
	04/24/02	0.500 U	0.500 U	0.500 U	1.00 M	2.00 U	80.0 U	250 U	500 U
	07/30/02	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	50.0 M	NA	NA
	01/28/03	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	80.0 M	563	500 M
	04/30/03	0.500 M	0.500 M	0.500 M	1.00 M	0.200 M	80.0 M	472	500 M
	01/29/04	0.500 M	0.500 M	0.500 M	1.00 M	NA	80.0 M	713	500 M
MW-6	02/01/02	30.6	12	12.4	11.3	2.00 U	2,270	NA	NA
	04/24/02	37.1	6.34	6.03	8.45	2.00 U	2,140	250 U	500 U
	07/30/02	16.6	1.51	1.92	5.86	2.00 M	1,730	NA	NA
	01/29/03	6.84	1.52	1.22	2.39	2.00 M	1,800	250 M	500 M
	04/29/03	31.3	4.34	2.30	1.51	1.70 M	2,080	250 M	500 M
DUP	01/29/04	53.7	3.51	3.52	6.98	NA	2,610	1,350	500 M
	01/29/04	51.2	3.33	3.26	6.44	NA	2,350	1,220	500 M
MW-7	01/31/02	0.500 U	0.500 U	0.500 U	1.00 U	2.00 U	80.0 U	NA	NA
	04/24/02	0.500 U	0.500 U	0.500 U	1.00 U	2.00 U	80.0 U	250 U	500 U
	07/29/02	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	50.0 M	250 M	500 M
	10/29/02	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	98.7	250 M	500 M
	01/28/03	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	80.0 M	250 M	500 M
	04/29/03	0.500 M	0.500 M	0.500 M	1.00 M	0.250 M	80.0 M	250 M	500 M
	07/29/03	0.500 M	0.500 M	0.500 M	1.00 M	NA	80.0 M	250 M	500 M
	10/28/03	0.500 M	2.11	0.500 M	1.00 M	NA	80.0 M	250 M	500 M
DUP	10/28/03	0.500 M	1.18	0.500 M	1.00 M	NA	80.0 M	250 M	500 M
	01/29/04	0.500 M	0.500 M	0.500 M	1.00 M	NA	80.0 M	250 M	500 M

TABLE 2
GROUNDWATER ANALYTICAL RESULTS - TPH BTEX
 Kinder Morgan Liquid Terminals LLC
 Linnton Terminal
 Portland, Oregon

Sample ID	Sample Date	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethyl-benzene ($\mu\text{g/L}$)	Xylene (total) ($\mu\text{g/L}$)	Naphthalene ($\mu\text{g/L}$)	Gasoline ($\mu\text{g/L}$)	Diesel ($\mu\text{g/L}$)	Heavy Oil ($\mu\text{g/L}$)
MW-8	02/01/02	10.8	10	22.3	8.31	4.92	2,350	NA	NA
	04/25/02	2.85	4.45	13.4	4.52	7.64	1,190	250 U	500 U
	07/29/02	10.2	4.02	27.8	14.8	41.0	1,900	3,340	500 M
	10/30/02	1.88	0.691	3.89	9.86	0.772	764	1,170	500 M
	01/29/03	15.8	4.80	27.6	8.76	5.89	2,340	3,390	500 M
	04/30/03	11.8	2.11	30.1	10.4	23.1	1,810	2,250	500 M
	07/29/03	8.38	2.50	5.23	5.80	NA	887	961	500 M
	10/28/03	0.927	1.97	1.25	4.18	NA	623	571	500 M
	01/30/04	8.34	1.73	29.0	19.4	NA	1,920	1,810	500 M
MW-9	02/01/02	357	4.48	2.50 M	5.00 M	10.0 U	1,730	NA	NA
	04/25/02	312	6.84	5.47	9.44	10.0 U	1,360	250 U	500 U
	07/29/02	727	7.44	6.54	12.2	1.00 M	2,850	250 M	500 M
	10/30/02	511	11.4	6.14	10.0 M	1.00 M	1,420	486	500 M
	01/29/03	193	2.66	2.50 M	5.00 M	0.500 M	1,390	402	500 M
	04/30/03	663	9.36	11.6	11.1	2.30 M	3,440	250 M	500 M
	07/30/03	519	10.8	8.51	17.3	NA	2,060	457	500 M
	10/29/03	32.6	0.576	4.94	1.00 M	NA	1,790	680	500 M
	01/30/04	49.0	7.30	6.52	11.8	NA	1,970	693	500 M
MW-10	02/01/02	15.5	7.7	6.97	5.89	10.0 M	3,590	NA	NA
DUP	02/01/02	18	8.7	7.83	6.7	10.0 U	4,010	NA	NA
	04/25/02	16.7	8.48	7.65	9.13	4.00 U	4,470	3,850	500 U
	11/27/02*	3.17	2.41	1.00 U	2.49	2.00 U	3,630	15,200	500 U
	04/30/03	15.4	9.14	6.63	5.00 M	100 M	3,630	483,000	5,000 M
	07/30/03	9.23	6.60	5.95	8.52	NA	3,320	99,100	10,000 M
	10/29/03	10.6	5.88	4.94	7.06	NA	4,120	146,000	2,500 M
	01/31/02	0.500 U	0.500 U	0.500 U	1.00 U	2.00 U	1,320	NA	NA
MW-12	04/25/02	1.00 U	1.00 U	1.00 U	2.00 U	4.00 U	1,970	4,030	500 U
	07/29/02	0.721	0.526	0.500 M	5.60	2.50 M	1,110	11,100	500 M
	07/29/02	0.729	0.534	0.500 M	5.68	5.00 M	1,140	5,180	500 U
	10/29/02	1.00 M	6.61	13.6	3.11	2.50 M	3,630	5,540	500 M
	01/28/03	0.500 M	0.534	0.500 M	1.00 M	3.00 M	1,250	110,000	10000 M
	04/29/03	0.500 M	0.547	0.500 M	2.55	1.50 M	740	14,500	500 M
	07/29/03	0.940	0.717	1.50	3.57	NA	832	2,000	500 M
DUP	10/28/03	0.933	1.51	1.31	2.65	NA	1,110	25,300	500 M
	01/29/04	2.05	0.500 M	1.17	6.78	NA	835	12,700	500 M

TABLE 2
GROUNDWATER ANALYTICAL RESULTS - TPH BTEX
 Kinder Morgan Liquid Terminals LLC
 Linnton Terminal
 Portland, Oregon

Sample ID	Sample Date	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethyl-benzene ($\mu\text{g/L}$)	Xylene (total) ($\mu\text{g/L}$)	Naphthalene ($\mu\text{g/L}$)	Gasoline ($\mu\text{g/L}$)	Diesel ($\mu\text{g/L}$)	Heavy Oil ($\mu\text{g/L}$)
MW-13	01/31/02	109	6.74	8.9	5.00 M	10.0 U	6,150	NA	NA
DUP	01/31/02	102	6.86	8.7	5.00 M	10.0 U	6,110	NA	NA
	04/25/02	48.5	7.56	9.14	5.00 U	10.0 U	5,700	250 U	500 U
DUP	04/25/02	51.8	8.62	8.76	5.00 U	10.0 U	5,720	250 U	500 U
	07/29/02	2.63	1.6	2.88	7.76	0.100 M	3,330	2,690	500 M
	10/29/02	4.68	3.35	2.38	6.37	4.00 M	2,320	2,180	762
DUP	10/29/02	5.82	3.10	2.45	5.89	3.00 M	2,350	2,020	1,000
	01/28/03	2.71	3.22	2.56	6.52	1.20 M	2,220	2,230	500 M
DUP	01/28/03	2.35	3.05	2.51	6.26	1.30 M	2,480	1,880	500 M
	04/29/03	107	3.56	5.72	5.00 M	2.50 M	6,160	833 M	1670 M
	07/29/03	3.23	2.48	1.84	4.91	NA	2,130	546	500 M
	10/28/03	2.18	3.90	1.50	4.43	NA	2,210	1,780	500 M
	01/29/04	16.8	1.32	4.19	7.76	NA	3,390	3,240	500 M
MW-14	01/31/02	0.500 U	0.500 U	0.500 U	1.00 U	2.00 U	80.0 U	NA	NA
	04/24/02	0.500 U	0.500 U	0.500 U	1.00 U	2.00 U	80.0 M	250 U	500 U
	07/30/02	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	50.0 M	305 M	610 M
	10/29/02	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	80.0 M	250 M	500 M
	01/29/03	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	80.0 M	250 M	500 M
	04/29/03	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	160	250 M	500 M
	07/29/03	0.500 M	0.500 M	0.500 M	1.00 M	NA	80.0 M	250 M	500 M
	10/28/03	0.500 M	0.792	0.500 M	1.00 M	NA	80.0 M	287 M	500 M
	01/29/04	0.500 M	0.500 M	0.500 M	1.00 M	NA	80.0 M	250 M	500 M
MW-15	01/31/02	0.500 U	0.500 U	0.500 U	1.00 U	2.00 U	80.0 U	NA	NA
	04/24/02	0.500 U	0.500 U	0.500 U	1.00 U	2.00 U	80.0 U	250 U	500 U
	07/30/02	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	50.0 M	250 M	500 M
	10/29/02	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	80.0 M	250 M	500 M
	01/29/03	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	80.0 M	250 M	500 M
	04/29/03	0.500 M	0.500 M	0.500 M	1.00 M	0.137	80.0 M	250 M	500 M
DUP	04/29/03	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	80.0 M	250 M	500 M
	07/29/03	0.500 M	0.500 M	0.500 M	1.00 M	NA	80.0 M	250 M	500 M
DUP	07/29/03	0.500 M	0.785	0.500 M	1.48	NA	80.0 M	250 M	500 M
	10/28/03	0.500 M	1.01	0.500 M	1.00 M	NA	80.0 M	250 M	500 M
	01/29/04	0.500 M	0.500 M	0.500 M	1.00 M	NA	80.0 M	250 M	500 M

TABLE 2
GROUNDWATER ANALYTICAL RESULTS - TPH BTEX
 Kinder Morgan Liquid Terminals LLC
 Linnton Terminal
 Portland, Oregon

Sample ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylene (total) (µg/L)	Naph- thalene (µg/L)	Gasoline (µg/L)	Diesel (µg/L)	Heavy Oil (µg/L)
MW-16	02/01/02	49.1	12.6	4.42	7.61	10.0 M	3,620	NA	NA
	04/25/02	46	14	2.50 U	8.73	10.0 U	3,570	4,040	1,050
	07/30/02	83.6	14.0	2.73	11.0	2.50 M	1,920	4,740	1000 M
DUP	07/30/02	79.3	14.4	3.31	13.0	2.50 M	1,950	6,240	2,060
	11/27/02*	79.9	11.3	1.00 U	3.84	2.00 U	2,000	2,660	1,160
	01/28/03	40.5	13.4	4.35	10.6	1.80 M	2,930	30,400	17,600
DUP	01/28/03	34.2	10.3	2.50	10.9	2.20 M	3,500	35,100	13,100
	04/29/03	43.7	13.0	3.06	8.68	2.00 M	2,300	12,900	5,160
	07/29/03	65.7	10.1	2.91	6.98	NA	1,420	11,100	5,870
	10/28/03	77.9	12.8	2.16	7.95	NA	1,910	7,520	3,440
MW-17	01/31/02	0.500 U	0.500 U	0.500 U	1.00 U	2.00 U	93.8	NA	NA
	04/24/02	0.500 U	0.500 U	0.500 U	1.00 M	2.00 M	126	360	500 U
	07/30/02	0.500 M	0.500 M	0.702	2.72	1.00 M	199	352	500 M
	10/30/02	0.500 M	0.500 M	0.500 M	1.00 M	1.00 M	80.0 M	250 M	500 M
	01/29/03	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	80.0 M	250 M	500 M
	04/29/03	0.500 M	0.500 M	0.500 M	1.00 M	0.300 M	118	256	500 M
DUP	04/29/03	0.500 M	0.500 M	0.500 M	1.00 M	0.350 M	80.0 M	250 M	500 M
	07/29/03	0.500 M	0.749	0.500 M	1.00 M	NA	109	553	500 M
DUP	07/29/03	0.500 M	0.500 M	0.500 M	1.00 M	NA	80.0 M	452	500 M
	10/28/03	0.500 M	0.500 M	0.500 M	1.00 M	NA	80.0 M	324	500 M
	01/29/04	0.500 M	0.500 M	0.500 M	1.00 M	NA	80.0 M	250 M	500 M
MW-18	04/25/02	0.500 U	0.500 U	0.500 U	1.00 U	2.00 U	80.0 U	250 U	500 U
DUP	04/25/02	0.500 U	0.500 U	0.500 U	1.00 U	2.00 U	80.0 M	250 U	500 U
	07/29/02	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	50.0 M	250 M	500 M
	10/30/02	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	80.0 M	250 M	500 M
	01/29/03	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	80.0 M	250 M	500 M
	04/29/03	0.500 M	0.500 M	0.500 M	1.00 M	0.100 M	80.0 M	250 M	500 M
	07/30/03	0.500 M	0.500 M	0.500 M	1.00 M	NA	80.0 M	250 M	500 M
	10/29/03	0.500 M	2.02	0.500 M	1.00 M	NA	80.0 M	250 M	500 M
	01/30/04	0.500 M	0.500 M	0.500 M	1.00 M	NA	80.0 M	250 M	500 M

TABLE 2
GROUNDWATER ANALYTICAL RESULTS - TPH BTEX
 Kinder Morgan Liquid Terminals LLC
 Linnton Terminal
 Portland, Oregon

Sample ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylene (total) (µg/L)	Naph- thalene (µg/L)	Gasoline (µg/L)	Diesel (µg/L)	Heavy Oil (µg/L)
MW-20	05/01/03	36.5	7.12	5.15	7.20	5.00 M	3,460	5,850	500 M
	07/30/03	45.7	7.59	8.15	8.07	NA	2,680	7,200	500 M
MW-21	05/01/03	3.15	4.92	2.92	3.51	3.00 M	2,260	6,040	500 M
	07/30/03	4.15	5.45	4.08	10.8	NA	3,730	4,830	500 M
MW-22	05/01/03	11.7	3.54	2.43	4.52	1.70 M	1,330	2,570	500 M
	07/30/03	10.4	7.04	1.67	7.30	NA	1,080	2,650	500 M
	10/29/03	0.500 M	1.18	0.500 M	1.00 M	NA	138	1,330	500 M
	01/30/04	6.88	0.950	3.03	12.3	NA	2,550	2,130	500 M
RW-1	11/26/02*	7.68	2.00 U	16.1	15.5	145	3,930	998,000	45,000
RW-2	11/26/02*	30.3	1.00 U	21.0	16.7	46.7	1,690	243,000	57,700
RW-3	11/26/02*	3.80	1.00 U	7.51	3.00 U	9.04	1,430	678,000	50000 U
Trip Blank	04/24/02	0.500 U	0.500 U	0.500 U	1.00 U	2.00 U	80.0 U	NA	NA
	04/25/02	0.500 U	0.500 U	0.500 U	1.00 U	2.00 U	80.0 U	NA	NA
	07/29/02	0.500 M	0.500 M	0.500 M	1.00 M	NA	50.0 M	NA	NA
	10/29/02	0.500 M	0.500 M	0.500 M	1.00 M	NA	NA	NA	NA

NOTES:

Gasoline Range Hydrocarbons analyzed by NW TPH-Gx Method

Diesel and Heavy Oil Range Hydrocarbons analyzed by NW TPH-DX Method

Benzene, Toluene, Ethylbenzene, Xylene, and Naphthalene (BTEX/N) analyzed by USEPA Method 8021B or 8260B

µg/l = micrograms per liter

Lab reported Diesel and Heavy Oil in mg/l

NA = Not Analyzed

J = Estimated Value

U = Analyte included in the analysis but not detected above laboratory method detection limits (MDLs)

M = Analyte included in the analysis but not detected above laboratory method reporting limits (MRLs)

Bold Face Font = Analyte detected above the MRLs

* = Additional RI Sampling

TABLE 3
GROUNDWATER ANALYTICAL PAH's
Kinder Morgan Liquid Terminals LLC
Linnton Terminal
Portland, Oregon

Sample ID	Sample Date	Acenaphthene ($\mu\text{g/L}$)	Acenaphthylene ($\mu\text{g/L}$)	Anthracene ($\mu\text{g/L}$)	Benz(a)anthracene ($\mu\text{g/L}$)	Benzo(a)pyrene ($\mu\text{g/L}$)	Benzo(b)fluoranthene ($\mu\text{g/L}$)	Benzo(ghi)perylene ($\mu\text{g/L}$)	Benzo(k)fluoranthene ($\mu\text{g/L}$)	Chrysene ($\mu\text{g/L}$)	Dibenz(a,h)anthracene ($\mu\text{g/L}$)	Fluoranthene ($\mu\text{g/L}$)	Fluorene ($\mu\text{g/L}$)	Indeno(1,2,3-cd)pyrene ($\mu\text{g/L}$)	Naphthalene ($\mu\text{g/L}$)	Phenanthrene ($\mu\text{g/L}$)	Pyrene ($\mu\text{g/L}$)
MW-1	02/01/02	5.00 U	2.50 U	2.74	0.500 U	0.500 U	0.500 U	0.500 U	0.500 M	1.00 U	0.500 U	20.9	0.500 U	12.5 U	13.3	2.23	
	11/26/2002*	2.26	0.500 U	1.98	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	1.00 U	0.500 U	13.9	0.500 U	5.00 U	11.0	1.48	
	01/29/03	10.0 M	5.00 M	10.8	0.284	0.394	0.322	0.200 M	0.266	1.46	0.400 M	5.00 M	60.6	0.200 M	20.0 M	54.7	6.98
	04/30/03	2.74	1.00 M	2.48	1.00 M	1.00 M	1.00 M	1.00 M	1.00 M	2.00 M	1.00 M	16.5	1.00 M	2.00 M	12.7	2.00	
MW-2	11/26/2002*	4.44	1.00 U	2.72	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	2.00 U	1.16	14.8	1.00 U	21.1	15.4	2.24	
MW-3	11/26/2002*	10.0 U	10.0 U	3.99	0.500 U	0.500 U	0.500 U	0.500 U	0.500 U	1.00 U	0.500 U	33.0 U	0.500 U	10.0 U	22.1	2.98	
MW-4	02/01/02	0.500 U	0.100 U	0.257	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	2.32	0.100 U	1.00 U	0.725	0.17	
	04/25/02	0.500 U	0.100 U	0.368	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	2.21	0.100 U	0.500 U	0.618	0.192	
	07/29/02	0.405	0.100 M	0.500 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	1.75	0.100 M	0.500 M	0.500 M	0.313	
	10/30/02	2.50 M	0.500 M	4.26	0.500 M	0.500 M	0.500 M	0.500 M	0.500 M	1.00 M	0.500 M	8.00 M	0.500 M	3.50 M	7.64	3.09	
DUP	10/30/02	1.50 M	0.500 M	2.18	0.500 M	0.500 M	0.500 M	0.500 M	0.500 M	1.00 M	0.5	4.36	0.500 M	2.00 M	3.60	1.61	
	01/29/03	0.800 M	0.400 M	0.860	0.400 M	0.400 M	0.400 M	0.400 M	0.400 M	0.800 M	0.400 M	2.97	0.400 M	1.20 M	2.23	0.600	
	04/30/03	2.50 M	2.50 M	2.50 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	2.50 M	4.88	0.100 M	2.50 M	2.74	0.774	
	07/29/03	1.00 M	0.750 M	1.79	0.500 M	0.500 M	0.500 M	0.500 M	0.500 M	1.00 M	0.500 M	5.12	0.500 M	3.25	4.40	1.35	
	10/28/03	3.00 M	2.00 M	4.00 M	2.00 M	2.00 M	2.00 M	2.00 M	2.00 M	4.00 M	2.00 M	11.0 M	2.00 M	3.00 M	8.85	4.00	
	01/30/04	3.00 M	2.50 M	5.90	1.00 M	1.00 M	1.00 M	1.00 M	1.00 M	2.00 M	1.00 M	11.5 M	1.00 M	4.50 M	10.3	4.41	
MW-5	02/01/02	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	
	04/24/02	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	0.100 U	0.100 U	0.100 M	0.100 U	0.100 U	
	01/28/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	
	04/30/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	
	01/29/04	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.150 M	0.100 M	0.100 M	
MW-6	02/01/02	0.153	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	0.131	0.100 U	5.00 U	0.225	0.100 U	
	04/24/02	0.151	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	0.101	0.100 U	2.00 U	0.214	0.100 U	
	01/29/03	0.129	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.200 M	0.100 M	2.00 M	0.128	0.100 M	
	04/29/03	0.107	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.200 M	0.100 M	1.70 M	0.110	0.100 M	
	01/29/04	0.115	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.140	0.100 M	1.95 M	0.146	0.100 M	
DUP	01/29/04	0.115	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.150 M	0.100 M	1.35 M	0.130	0.100 M	

TABLE 3
GROUNDWATER ANALYTICAL PAH's
Kinder Morgan Liquid Terminals LLC
Linnton Terminal
Portland, Oregon

Sample ID	Sample Date	Acenaphthene ($\mu\text{g/L}$)	Acenaphthylene ($\mu\text{g/L}$)	Anthracene ($\mu\text{g/L}$)	Benzo(a)anthracene ($\mu\text{g/L}$)	Benzo(a)pyrene ($\mu\text{g/L}$)	Benzo(b)fluoranthene ($\mu\text{g/L}$)	Benzo(ghi)perylene ($\mu\text{g/L}$)	Benzo(k)fluoranthene ($\mu\text{g/L}$)	Chrysene ($\mu\text{g/L}$)	Dibenz(a,h)anthracene ($\mu\text{g/L}$)	Fluoranthene ($\mu\text{g/L}$)	Fluorene ($\mu\text{g/L}$)	Indeno(1,2,3-c,d)pyrene ($\mu\text{g/L}$)	Naphthalene ($\mu\text{g/L}$)	Phenanthren ($\mu\text{g/L}$)	Pyrene ($\mu\text{g/L}$)
MW-7	01/31/02	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	
	04/24/02	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U
	07/29/02	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M
	10/29/02	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M
	01/28/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M
	04/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.250 M	0.100 M	0.100 M
	07/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M
	10/28/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M
DUP	10/28/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M
	01/29/04	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M
MW-8	02/01/02	18.9	2.00 U	0.759	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	1.03	12.4	0.100 U	2.56	11.2	1.19	
	04/25/02	40.5	0.500 M	0.606	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 U	1.69	18.6	0.100 U	8.36	7.73	1.72	
	07/29/02	57.1	0.100 M	0.629	0.117	0.100 M	0.100 M	0.100 M	0.100 M	0.178	0.200 M	1.36	22.3	0.100 M	41.0	7.78	2.34
	10/30/02	90.3	1.00 M	1.31	0.568	0.723	0.529	0.675	0.500 M	0.733	1.00 M	2.65	43.4	0.500 M	0.772	9.42	3.34
	01/29/03	18.9	1.00 M	0.429	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.697	9.94	0.100 M	5.89	4.72	0.798
	04/30/03	27.1	5.00 M	0.780	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.854	13.4	0.100 M	23.1	4.21	1.30
	07/29/03	70.6	0.303	0.688	0.200 M	0.200 M	0.200 M	0.200 M	0.200 M	0.208	0.400 M	1.32	33.6	0.200 M	2.94	10.0	1.73
	10/28/03	51.7	0.250 M	0.527	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.114	0.200 M	0.917	26.7	0.100 M	0.322	4.84	1.17
	01/30/04	32.1	0.400 M	0.618	0.200 M	0.200 M	0.200 M	0.200 M	0.200 M	0.200 M	0.400 M	0.777	13.3	0.200 M	10.5	6.37	0.879

TABLE 3
GROUNDWATER ANALYTICAL PAH's
Kinder Morgan Liquid Terminals LLC
Linnton Terminal
Portland, Oregon

Sample ID	Sample Date	Acenaphthene ($\mu\text{g/L}$)	Acenaphthylene ($\mu\text{g/L}$)	Anthracene ($\mu\text{g/L}$)	Benzo(a)anthracene ($\mu\text{g/L}$)	Benzo(a)pyrene ($\mu\text{g/L}$)	Benzo(b)fluoranthene ($\mu\text{g/L}$)	Benzo(g,h,i)perylene ($\mu\text{g/L}$)	Benzo(k)fluoranthene ($\mu\text{g/L}$)	Chrysene ($\mu\text{g/L}$)	Dibenzo(a,h)anthracene ($\mu\text{g/L}$)	Fluoranthene ($\mu\text{g/L}$)	Fluorene ($\mu\text{g/L}$)	Indeno(1,2,3-cd)pyrene ($\mu\text{g/L}$)	Naphthalene ($\mu\text{g/L}$)	Phenanthrene ($\mu\text{g/L}$)	Pyrene ($\mu\text{g/L}$)
MW-9	02/01/02	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	0.100 U	0.100 U	0.500 U	0.100 U	0.100 M	
	04/25/02	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	0.100 U	0.100 U	1.00 U	0.100 U	0.100 U	0.100 M
	07/29/02	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	1.00 M	0.100 M	0.100 M	0.100 M
	10/30/02	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	1.00 M	0.100 M	0.100 M	0.100 M
	01/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.500 M	0.100 M	0.100 M	0.100 M
	04/30/03	0.112	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	2.30 M	0.100 M	0.100 M	0.100 M
	07/30/03	0.200 M	0.200 M	0.200 M	0.200 M	0.200 M	0.200 M	0.200 M	0.200 M	0.400 M	0.200 M	0.200 M	0.200 M	2.00 M	0.200 M	0.200 M	0.200 M
	10/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.550 M	0.100 M	0.100 M	0.100 M
	01/30/04	0.116	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	1.65 M	0.100 M	0.100 M	0.100 M
MW-10	02/01/02	7.81	0.100 U	0.304	0.100 U	0.100 U	0.100 U	0.100 U	0.100 M	0.200 U	0.447	5.21	0.100 U	5.00 U	1.41	0.512	
DUP	02/01/02	6.6	0.500 U	0.228	0.100 U	0.100 U	0.100 U	0.100 U	0.100 M	0.200 U	0.387	4.19	0.100 U	5.00 U	0.557	0.451	
	04/25/02	4.39	0.100 U	0.367	0.123	0.108	0.100 M	0.100 M	0.100 M	0.200 U	0.784	3.21	0.100 M	2.50 U	0.903	0.933	
	11/27/02*	10.8	0.500 U	1.56	0.500 U	0.678	0.500 U	0.695	0.500 U	0.605	1.00 U	1.77	10.7	0.500 U	17.0 U	9.62	2.20
	04/30/03	150	100 M	23.1	12.0	10.6	6.90	5.00	7.08	14.9	2.00 M	73.6	163	4.00	100 M	176	76.1
	07/30/03	29.4	6.00 M	5.16	3.40	4.07	3.09	3.24	2.00 M	4.16	4.00 M	10.5	25.5	2.18	32.0 M	22.9	18.8
	10/29/03	19.8	3.50 M	4.02	2.17	2.12	1.44	1.35	1.22	2.92	2.00 M	9.99	19.6	1.00 M	12.5 M	20.6	14.3
MW-12	01/31/02	2.05	0.500 U	0.212	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	4.34	0.100 U	2.50 U	4.11	0.100 M	
	04/25/02	1.52	0.100 U	0.349	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 M	3.32	0.100 U	1.00 U	4.55	0.143	
	07/29/02	5.00 M	0.500 M	0.593	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.500 M	5.33	0.100 M	2.50 M	7.29	0.260	
DUP	07/29/02	2.44	0.500 M	0.655	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	4.67	0.100 M	5.00 M	5.23	0.293	
	10/29/02	1.72	0.100 M	0.353	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.500 M	3.89	0.100 M	2.50 M	5.97	0.123	
	01/28/03	3.33	0.500 M	1.01	0.500 M	0.500 M	0.500 M	0.500 M	0.500 M	0.500 M	1.00 M	0.500 M	6.96	0.500 M	3.00 M	10.5	0.566
	04/29/03	4.00	1.00 M	1.18	1.00 M	1.00 M	1.00 M	1.00 M	1.00 M	2.00 M	1.00 M	9.45	1.00 M	1.50 M	10.9	1.00 M	
	07/29/03	2.23	0.700 M	0.254	0.200 M	0.200 M	0.200 M	0.200 M	0.200 M	0.400 M	0.200 M	4.77	0.200 M	2.20 M	5.09	0.200 M	
	10/28/03	5.26	1.60 M	2.20 M	0.400 M	0.400 M	0.400 M	0.400 M	0.400 M	0.800 M	0.452	10.1	0.400 M	3.80 M	18.0	1.29	
	01/29/04	3.36	1.50 M	1.00 M	1.00 M	1.00 M	1.00 M	1.00 M	1.00 M	2.00 M	1.00 M	7.12	1.00 M	3.00 M	7.44	1.00 M	

TABLE 3
GROUNDWATER ANALYTICAL PAH's
Kinder Morgan Liquid Terminals LLC
Linnton Terminal
Portland, Oregon

Sample ID	Sample Date	Acenaphthene ($\mu\text{g/L}$)	Acenaphthylen ($\mu\text{g/L}$)	Anthracene ($\mu\text{g/L}$)	Benzo(a)anthracene ($\mu\text{g/L}$)	Benzo(a)pyrene ($\mu\text{g/L}$)	Benzo(b)fluoranthene ($\mu\text{g/L}$)	Benzo(b)perylene ($\mu\text{g/L}$)	Benzo(k)fluoranthene ($\mu\text{g/L}$)	Chrysene ($\mu\text{g/L}$)	Dibenz(a,h)anthracene ($\mu\text{g/L}$)	Fluoranthene ($\mu\text{g/L}$)	Fluorene ($\mu\text{g/L}$)	Indeno(1,2,3-cd)pyrene ($\mu\text{g/L}$)	Naphthalene ($\mu\text{g/L}$)	Phenanthrene ($\mu\text{g/L}$)	Pyrene ($\mu\text{g/L}$)
MW-13	01/31/02	1.62	0.100 U	0.16	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 M	3.23	0.100 U	5.00 U	2.61	0.100 M	
DUP	01/31/02	1.47	0.100 U	0.144	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 M	3.26	0.100 U	2.00 U	3.3	0.100 M	
	04/25/02	1.25	0.100 U	0.203	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 M	2.75	0.100 U	2.00 U	2.63	0.100 M	
DUP	04/25/02	1.36	0.100 U	0.138	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 M	2.73	0.100 U	2.00 U	2.74	0.100 M	
	07/29/02	0.858	0.100 M	0.172	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	1.90	0.100 M	0.100 M	3.61	0.157	
	10/29/02	1.31	0.500 M	1.00 M	0.500 M	0.500 M	0.500 M	0.500 M	0.500 M	1.00 M	0.500 M	2.75	0.500 M	4.00 M	4.91	0.515	
DUP	10/29/02	0.802	0.100 M	0.250 M	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 M	1.68	0.100 M	3.00 M	2.42	0.121	
	01/28/03	0.596	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	1.15	0.100 M	1.20 M	1.13	0.100 M	
DUP	01/28/03	0.710	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	1.40 M	0.100 M	1.30 M	1.11	0.100 M	
	04/29/03	2.69	2.50 M	0.223	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	5.57	0.100 M	2.50 M	2.94	0.120	
	07/29/03	0.806	0.300 M	0.200 M	0.200 M	0.200 M	0.200 M	0.200 M	0.200 M	0.400 M	0.200 M	1.69	0.200 M	2.20 M	2.86	0.200 M	
	10/28/03	0.843	0.250 M	0.112	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	1.69	0.100 M	1.45 M	2.42	0.100 M	
	01/29/04	1.85	0.500 M	0.236	0.200 M	0.200 M	0.200 M	0.200 M	0.200 M	0.400 M	0.200 M	3.88	0.200 M	4.40 M	5.12	0.200 M	
MW-14	01/31/02	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 M	
	04/24/02	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	
	07/30/02	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	
	10/29/02	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	
	01/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	
	04/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	
	07/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	
	10/28/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	
	01/29/04	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	

TABLE 3
GROUNDWATER ANALYTICAL PAH's
Kinder Morgan Liquid Terminals LLC
Linnton Terminal
Portland, Oregon

Sample ID	Sample Date	Acenaphthene ($\mu\text{g/L}$)	Acenaphthylene ($\mu\text{g/L}$)	Anthracene ($\mu\text{g/L}$)	Benzo(a)anthracene ($\mu\text{g/L}$)	Benzo(a)pyrene ($\mu\text{g/L}$)	Benzo(b)fluoranthene ($\mu\text{g/L}$)	Benzo(ghi)perylene ($\mu\text{g/L}$)	Benzo(k)fluoranthene ($\mu\text{g/L}$)	Chrysene ($\mu\text{g/L}$)	Dibenz(a,h)anthracene ($\mu\text{g/L}$)	Fluoranthene ($\mu\text{g/L}$)	Fluorene ($\mu\text{g/L}$)	Indeno(1,2,3-cd)pyrene ($\mu\text{g/L}$)	Naphthalene ($\mu\text{g/L}$)	Phenanthrene ($\mu\text{g/L}$)	Pyrene ($\mu\text{g/L}$)
MW-15	01/31/02	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	
	04/24/02	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	
	07/30/02	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	
	10/29/02	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	
	01/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	
	04/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.137	0.100 M	
DUP	04/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	
	07/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	
DUP	07/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	
	10/28/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	
	01/29/04	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	
MW-16	02/01/02	1.4	0.200 U	0.200 M	0.200 M	0.200 M	0.200 U	0.200 U	0.200 M	0.400 U	0.358	2.97	0.200 U	4.00 U	1.71	0.342	
	04/25/02	1.16	0.100 U	0.256	0.255	0.218	0.208	0.158	0.183	0.273	0.200 U	0.642	2.84	0.138	1.50 U	2.49	0.626
	07/30/02	1.34	0.200 M	0.409	0.312	0.231	0.266	0.200 M	0.200 M	0.476	0.400 M	0.676	2.65	0.200 M	2.50 M	2.97	0.942
DUP	07/30/02	1.36	0.200 M	0.367	0.233	0.200 M	0.200 M	0.200 M	0.200 M	0.374	0.400 M	0.567	2.50	0.200 M	2.50 M	2.80	0.685
	11/27/02*	4.12	1.00 U	2.41	1.27	1.47	2.35	1.00 U	1.00 U	3.15	2.00 U	2.99	11.9	1.00 U	7.40 U	13.5	3.27
	01/28/03	1.24	0.200 M	0.200 M	0.200 M	0.200 M	0.200 M	0.200 M	0.200 M	0.400 M	0.200 M	2.37	0.200 M	1.80 M	1.74	0.235	
DUP	01/28/03	1.33	0.200 M	0.242	0.200 M	0.200 M	0.200 M	0.200 M	0.200 M	0.228	0.400 M	0.298	2.73	0.200 M	2.20 M	2.38	0.368
	04/29/03	2.78	1.00 M	1.00 M	1.00 M	1.00 M	1.00 M	1.00 M	1.00 M	1.00 M	2.00 M	1.00 M	5.86	1.00 M	2.00 M	4.86	1.00 M
	07/29/03	2.00	0.500 M	0.614	0.640	0.633	1.06	0.500 M	0.500 M	1.10	1.00 M	1.08	4.16	0.500 M	4.50 M	3.05	1.42
	10/28/03	1.53	0.500 M	0.500 M	0.500 M	0.500 M	0.500 M	0.500 M	0.500 M	0.500 M	1.00 M	0.500 M	3.05	0.500 M	1.75 M	2.17	0.500 M

TABLE 3
GROUNDWATER ANALYTICAL PAH's
Kinder Morgan Liquid Terminals LLC
Linnton Terminal
Portland, Oregon

Sample ID	Sample Date	Acenaphthene ($\mu\text{g/L}$)	Acenaphthylene ($\mu\text{g/L}$)	Anthracene ($\mu\text{g/L}$)	Benzo(a)anthracene ($\mu\text{g/L}$)	Benzo(a)pyrene ($\mu\text{g/L}$)	Benzo(b)fluoranthene ($\mu\text{g/L}$)	Benzo(ghi)perylene ($\mu\text{g/L}$)	Benzo(k)fluoranthene ($\mu\text{g/L}$)	Chrysene ($\mu\text{g/L}$)	Dibenz(a,h)anthracene ($\mu\text{g/L}$)	Fluoranthene ($\mu\text{g/L}$)	Fluorene ($\mu\text{g/L}$)	Indeno(1,2,3-cd)pyrene ($\mu\text{g/L}$)	Naphthalene ($\mu\text{g/L}$)	Phenanthrene ($\mu\text{g/L}$)	Pyrene ($\mu\text{g/L}$)
MW-17	01/31/02	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	0.214	0.100 U	0.200 U	0.301	0.100 U	
	04/24/02	0.100 U	0.100 U	0.2100 M	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.187	0.100 U
	07/30/02	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	1.00 M	0.100 M	0.100 M	0.100 M
	10/30/02	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	1.00 M	0.100 M	0.100 M	0.100 M
	01/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M
	04/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.300 M	0.100 M	0.100 M	0.100 M	0.100 M
DUP	04/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.350 M	0.100 M	0.100 M	0.100 M	0.100 M
	07/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.250 M	0.100 M	0.100 M	0.100 M	0.100 M
DUP	07/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M
	10/28/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M
	01/29/04	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M
MW-18	04/25/02	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U
DUP	04/25/02	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.200 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U
	07/29/02	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M
	10/30/02	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M
	01/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M
	04/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M
	07/30/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M
	10/29/03	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M
	01/30/04	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.251	0.100 M

TABLE 3
GROUNDWATER ANALYTICAL PAH's
Kinder Morgan Liquid Terminals LLC
Linniton Terminal
Portland, Oregon

Sample ID	Sample Date	Acenaphthene ($\mu\text{g/L}$)	Acenaphthylene ($\mu\text{g/L}$)	Anthracene ($\mu\text{g/L}$)	Benzo(a)anthracene ($\mu\text{g/L}$)	Benzo(a)pyrene ($\mu\text{g/L}$)	Benzo(b)fluoranthene ($\mu\text{g/L}$)	Benzo(ghi)perylene ($\mu\text{g/L}$)	Benzo(k)fluoranthene ($\mu\text{g/L}$)	Chrysene ($\mu\text{g/L}$)	Dibenz(a,h)anthracene ($\mu\text{g/L}$)	Fluoranthene ($\mu\text{g/L}$)	Fluorene ($\mu\text{g/L}$)	Indeno(1,2,3-cd)pyrene ($\mu\text{g/L}$)	Naphthalene ($\mu\text{g/L}$)	Phenanthrene ($\mu\text{g/L}$)	Pyrene ($\mu\text{g/L}$)
MW-20	05/01/03	11.7	2.50 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.368	6.24	0.100 M	5.00 M	0.820	0.495	
	07/30/03	21.8	1.00 M	0.500 M	0.500 M	0.500 M	0.500 M	0.500 M	0.500 M	1.00 M	0.979	9.16	0.500 M	8.00 M	3.61	1.31	
MW-21	05/01/03	6.08	1.00 M	1.00 M	1.00 M	1.00 M	1.00 M	1.00 M	1.00 M	2.00 M	1.00 M	6.13	1.00 M	3.00 M	2.59	1.00 M	
	07/30/03	5.25 M	0.750 M	0.500 M	0.500 M	0.500 M	0.500 M	0.500 M	0.500 M	1.00 M	0.500 M	4.59	0.500 M	6.50 M	2.23	0.704	
MW-22	05/01/03	2.67	0.100 M	0.158	0.100 M	0.100 M	0.100 M	0.100 M	0.100 M	0.200 M	0.726	1.15	0.100 M	1.70 M	0.146	1.09	
	07/30/03	6.14	0.300 M	0.362	0.223	0.219	0.200 M	0.200 M	0.200 M	0.400 M	1.68	1.70	0.200 M	2.60 M	2.22	2.31	
	10/29/03	0.286	0.100 M	0.150 M	0.123	0.138	0.100 M	0.125	0.100 M	0.153	0.200 M	0.835	0.110	0.100 M	0.400 M	0.150 M	1.19
	01/30/04	1.90	0.300 M	0.276	0.200 M	0.200 M	0.200 M	0.200 M	0.200 M	0.400 M	0.936	1.78	0.200 M	1.70 M	1.25	1.28	
RW-1	11/26/02*	30.0 U	25.0 U	14.3	1.41	1.00 U	1.70	1.00 U	1.00 U	4.19	2.00 U	4.57	130 U	1.00 U	224	87.0	16.1
RW-2	11/26/02*	6.30	0.100 U	2.42	0.100 U	0.100 U	0.100 U	0.100 U	0.100 U	1.83	2.00 U	1.21	14.7	1.00 U	56.2	17.7	1.75
RW-3	11/26/02*	70.0 U	57.1 U	19.5	2.48	2.02	1.43	1.14 U	1.45	5.45	2.29 U	6.02	186 U	1.14 U	100 U	231	18.8

NOTES:

Polynuclear Aromatic Compounds (PAHs) analyzed by USEPA Method 8270M-SIM

$\mu\text{g/L}$ = micrograms per liter

J = Estimated Value

U = Analyte included in the analysis but not detected above laboratory method detection limits (MDLs)

M = Analyte included in the analysis but not detected above laboratory method reporting limits (MRLs)

Bold Face Font = Analyte detected above the MRLs

* = Additional RI Sampling

TABLE 4
GROUNDWATER ANALYTICAL - TOTAL METALS
Kinder Morgan Liquid Terminals LLC
Linnont Terminal
Portland, Oregon

Sample ID	Sample Date	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Lead (mg/L)	Mercury (mg/L)	Selenium (mg/L)	Silver (mg/L)	Zinc (mg/L)
MW-1	02/01/02	0.0051	0.137J	0.00100 U	0.0019	0.0035	0.00100 M	0.000200 U	0.00100 M	0.00100 U	0.00863
	11/26/02*	0.00576	0.192	0.00100 U	0.00638	0.0165	0.00580	0.000200 U	0.00111	0.00100 U	0.0278
	01/29/03	0.00408	0.142	0.00100 M	0.00216	0.00657	0.00293	0.000400 M	0.00100 M	0.00100 M	0.0113
	04/30/03	0.00451	0.102	0.00100 M	0.00108	0.00200 M	0.00100 M	0.000200 M	0.00123	0.00100 M	0.00500 M
MW-2	11/26/02*	0.0410	0.119	0.00100 U	0.00132	0.00345	0.00497	0.000200 U	0.00100 U	0.00100 U	0.00770
MW-3	11/26/02*	0.0196	0.152	0.00100 U	0.00303	0.00599	0.00247	0.000200 U	0.00140	0.00100 U	0.0144
MW-4	02/01/02	0.00554	0.0916	0.00100 U	0.00100 M	0.00248	0.00100 M	0.000200 U	0.00113	0.00100 U	0.00500 M
	04/25/02	NA	NA	NA	NA	NA	0.00100 U	NA	NA	NA	NA
	07/29/02	NA	NA	NA	NA	NA	0.00100 M	NA	NA	NA	NA
	10/30/02	NA	NA	NA	NA	NA	0.00438	NA	NA	NA	NA
DUP	10/30/02	NA	NA	NA	NA	NA	0.00607	NA	NA	NA	NA
	01/29/03	0.00503	0.0791	0.00100 M	0.00102	0.00200 M	0.00100 M	0.000200 M	0.00100 M	0.00100 M	0.00500 M
	04/30/03	0.00511	0.0759	0.00100 M	0.00100 M	0.00200 M	0.00100 M	0.000200 M	0.00137	0.00100 M	0.00540
	07/29/03	0.0388	0.107	0.00500 M	0.00733	0.00679	0.00177	0.000200 M	0.00500 M	0.00500 M	0.0196
	10/28/03	0.0734	0.202	0.00100 M	0.0197	0.0219	0.00898	0.000200 M	0.00100 M	0.00100 M	0.0735
	01/30/04	0.0123	0.0950	0.00100 M	0.00132	0.00221	0.00100 M	0.000200 M	0.00117	0.00100 M	0.0168
MW-5	02/01/02	0.00342	0.14	0.00100 M	0.00611	0.0161	0.00809	0.000200 U	0.00100 M	0.00100 U	0.0356
	04/24/02	NA	NA	NA	NA	NA	0.00976	NA	NA	NA	NA
	07/30/02	NA	NA	NA	NA	NA	0.00722	NA	NA	NA	NA
	01/28/03	0.00246	0.0801	0.00100 M	0.00316	0.00675	0.00475	0.000800 M	0.00100 M	0.00100 M	0.0222
	04/30/03	0.00195	0.0637	0.00100 M	0.00210	0.00662	0.00387	0.000200 M	0.00100 M	0.00100 M	0.0170
	01/29/04	0.00243	0.0855	0.00100 M	0.00218	0.00646	0.00463	0.000200 M	0.00110	0.00100 M	0.0243
MW-6	02/01/02	0.0403	0.204	0.00189	0.00163	0.0069	0.00265	0.000200 U	0.00100 M	0.00100 U	0.0486
	04/24/02	NA	NA	NA	NA	NA	0.00143	NA	NA	NA	NA
	01/29/03	0.0465	0.182	0.00100 M	0.00253	0.00724	0.00651	0.000200 M	0.00100 M	0.00100 M	0.0617
	04/29/03	0.0391	0.0961	0.00100 M	0.00100 M	0.00200	0.00100 M	0.000200 M	0.00100 M	0.00100 M	0.00619
	01/29/04	0.0551	0.129	0.00100 M	0.00100 M	0.00430	0.00206	0.000200 M	0.00100 M	0.00100 M	0.0178
Dup	01/29/04	0.0570	0.137	0.00100 M	0.00100 M	0.00417	0.00203	0.000200 M	0.00100 M	0.00100 M	0.0156

TABLE 4
GROUNDWATER ANALYTICAL - TOTAL METALS
 Kinder Morgan Liquid Terminals LLC
 Linnton Terminal
 Portland, Oregon

Sample ID	Sample Date	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Lead (mg/L)	Mercury (mg/L)	Selenium (mg/L)	Silver (mg/L)	Zinc (mg/L)
MW-7	01/31/02	0.00339	0.0786	0.00100 M	0.00294	0.00673	0.00214	0.000200 U	0.00100 M	0.00100 U	0.014
	04/24/02	NA	NA	NA	NA	NA	0.00240	NA	NA	NA	NA
	07/29/02	NA	NA	NA	NA	NA	0.00735	NA	NA	NA	NA
	10/29/02	NA	NA	NA	NA	NA	0.0346	NA	NA	NA	NA
	01/28/03	0.00161	0.0574	0.00100 M	0.00100 M	0.00318	0.00106	0.000200 M	0.00100 M	0.00100 M	0.00763
	04/29/03	0.00171	0.0629	0.00100 M	0.00174	0.00396	0.00219	0.000200 M	0.00100 M	0.00100 M	0.0135
	07/29/03	0.00500 M	0.0735	0.00500 M	0.00676	0.00675	0.00223	0.000200 M	0.00500 M	0.00500 M	0.0166
	10/28/03	0.00180	0.0516	0.00100 M	0.00100 M	0.00292	0.00100 M	0.000200 M	0.00100 M	0.00100 M	0.00595
DUP	10/28/03	0.00578	0.185	0.00100 M	0.00873	0.0199	0.00980	0.000200 M	0.00100 M	0.00100 M	0.0532
	01/29/04	0.00239	0.0769	0.00100 M	0.00286	0.00563	0.00249	0.000200 M	0.00100 M	0.00100 M	0.0201
MW-8	02/01/02	0.00884	0.0396	0.00100 M	0.00100 M	0.00100 M	0.01160	0.000200 U	0.00100 M	0.00100 U	0.00500 M
	04/25/02	NA	NA	NA	NA	NA	0.00761	NA	NA	NA	NA
	07/29/02	NA	NA	NA	NA	NA	0.00510	NA	NA	NA	NA
	10/30/02	NA	NA	NA	NA	NA	0.00495	NA	NA	NA	NA
	01/29/03	0.00530	0.0348	0.00100 M	0.00100 M	0.00200 M	0.0147	0.000200 M	0.00100 M	0.00100 M	0.00979
	04/30/03	0.00560	0.0265	0.00100 M	0.00100 M	0.00200 M	0.00900	0.000200 M	0.00100 M	0.00100 M	0.0121
	07/29/03	0.00922	0.106	0.00500 M	0.00500 M	0.00500 M	0.00355	0.000200 M	0.00500 M	0.00500 M	0.0172
	10/28/03	0.00284	0.0502	0.00100 M	0.00156	0.00316	0.00373	0.000200 M	0.00104	0.00100 M	0.00704
	01/30/04	0.00333	0.0318	0.00100 M	0.00100 M	0.00200 M	0.0109	0.000200 M	0.00100 M	0.00100 M	0.00743
MW-9	02/01/02	0.0384	0.288	0.00100 M	0.0228	0.048	0.02390	0.000200 U	0.00133	0.00100 M	0.106
	04/25/02	NA	NA	NA	NA	NA	0.00102	NA	NA	NA	NA
	07/29/02	NA	NA	NA	NA	NA	0.03840	NA	NA	NA	NA
	10/30/02	NA	NA	NA	NA	NA	0.0802	NA	NA	NA	NA
	01/29/03	0.0308	0.0806	0.00100 M	0.00265	0.00462	0.00273	0.000200 M	0.00100 M	0.00100 M	0.0162
	04/30/03	0.0352	0.0889	0.00100 M	0.00306	0.00530	0.00390	0.000200 M	0.00100 M	0.00100 M	0.0199
	07/30/03	0.0570	0.351	0.00500 M	0.0359	0.0645	0.0351	0.000200 M	0.00500 M	0.00500 M	0.177
	10/29/03	0.0455	0.352	0.00100 M	0.0284	0.0616	0.0339	0.000200 M	0.00100 M	0.00100 M	0.154
	01/30/04	0.0527	0.143	0.00100 M	0.00629	0.0118	0.00820	0.000200 M	0.00100 M	0.00100 M	0.0601
MW-10	02/01/02	0.00576	0.0204	0.00100 U	0.00149	0.00200 M	0.00308	0.000200 U	0.00100 M	0.00100 U	0.00563
DUP	02/01/02	0.00465	0.0128	0.00100 U	0.00103	0.00200 M	0.00226	0.000200 U	0.00100 U	0.00100 U	0.00500 M
	04/25/02	NA	NA	NA	NA	NA	0.00648	NA	NA	NA	NA
	11/27/02*	0.0187	0.553	0.00286	0.107	0.167	0.153	0.000200 U	0.00208	0.00122	0.465
	04/30/03	0.00672	0.0600	0.00100 M	0.00661	0.0116	0.0477	0.000200 M	0.00100 M	0.00100 M	0.0421
	07/30/03	0.00500 M	0.0254	0.00500 M	0.00520	0.00500 M	0.0123	0.000200 M	0.00500 M	0.00500 M	0.0155
	10/29/03	0.00496	0.0273	0.00100 M	0.00100 M	0.00200 M	0.00941	0.000200 M	0.00100 M	0.00100 M	0.00500 M

TABLE 4
GROUNDWATER ANALYTICAL - TOTAL METALS
Kinder Morgan Liquid Terminals LLC
Linnont Terminal
Portland, Oregon

Sample ID	Sample Date	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Lead (mg/L)	Mercury (mg/L)	Selenium (mg/L)	Silver (mg/L)	Zinc (mg/L)
MW-12	01/31/02	0.0594	0.0804	0.00100 U	0.00138	0.00200 M	0.00175	0.000200 U	0.00100 M	0.00100 U	0.00500 M
	04/25/02	NA	NA	NA	NA	NA	0.00444	NA	NA	NA	NA
	07/29/02	NA	NA	NA	NA	NA	0.00860	NA	NA	NA	NA
DUP	07/29/02	NA	NA	NA	NA	NA	0.00768	NA	NA	NA	NA
	10/29/02	NA	NA	NA	NA	NA	0.0208	NA	NA	NA	NA
	01/28/03	0.0576	0.0886	0.00100 M	0.00337	0.00396	0.00618	0.000200 M	0.00100 M	0.00100 M	0.0115
	04/29/03	0.0624	0.0836	0.00100 M	0.00219	0.00300	0.00496	0.000200 M	0.00100 M	0.00100 M	0.0144
	07/29/03	0.0636	0.0476	0.00500 M	0.00500 M	0.00500 M	0.00187	0.000200 M	0.00500 M	0.00500 M	0.00500 M
	10/28/03	0.0704	0.130	0.00100 M	0.00992	0.0132	0.0188	0.000200 M	0.00200 M	0.00100 M	0.0318
	01/29/04	0.0736	0.0938	0.00100 M	0.00358	0.00456	0.00918	0.000200 M	0.00100 M	0.00100 M	0.0172
MW-13	01/31/02	0.0551	0.254	0.00100 U	0.0156	0.0259	0.0138	0.000200 U	0.00100 M	0.00100 U	0.0648
DUP	01/31/02	0.0543	0.266	0.00100 U	0.0177	0.0279	0.0145	0.000200 U	0.00100 M	0.00100 M	0.0764
	04/25/02	NA	NA	NA	NA	NA	0.0109	NA	NA	NA	NA
DUP	04/25/02	NA	NA	NA	NA	NA	0.0150	NA	NA	NA	NA
	07/29/02	NA	NA	NA	NA	NA	0.4170	NA	NA	NA	NA
	10/29/02	NA	NA	NA	NA	NA	2.59	NA	NA	NA	NA
DUP	10/29/02	NA	NA	NA	NA	NA	2.02	NA	NA	NA	NA
	01/28/03	0.0608	0.0951	0.00100 M	0.00280	0.00422	0.00451	0.000200 M	0.00100 M	0.00100 M	0.0233
DUP	01/28/03	0.0608	0.0949	0.00100 M	0.00299	0.00361	0.00409	0.000200 M	0.00100 M	0.00100 M	0.0133
	04/29/03	0.0511	0.214	0.00100 M	0.0112	0.0174	0.0160	0.000200 M	0.00100 M	0.00100 M	0.195
	07/29/03	0.0397	0.0919	0.00500 M	0.00510	0.00500 M	0.00221	0.000200 M	0.00500 M	0.00500 M	0.0220
	10/28/03	0.105	0.721	0.00100 M	0.0586	0.115	0.0725	0.000200 M	0.00113	0.00100 M	0.268
	01/29/04	0.0720	0.216	0.00100 M	0.00948	0.0140	0.0139	0.000200 M	0.00100 M	0.00100 M	0.237
MW-14	01/31/02	0.0165	0.456	0.00100 M	0.0402	0.078	0.0332	0.000200 U	0.00100 M	0.00100 M	0.199
	04/24/02	NA	NA	NA	NA	NA	0.0140	NA	NA	NA	NA
	07/30/02	NA	NA	NA	NA	NA	0.2520	NA	NA	NA	NA
	10/29/02	NA	NA	NA	NA	NA	0.103	NA	NA	NA	NA
	01/29/03	0.0149	0.341	0.00100 M	0.0364	0.0604	0.0269	0.000200 M	0.00100 M	0.00100 M	0.168
	04/29/03	0.00954	0.328	0.00100 M	0.0228	0.0466	0.0231	0.000200 M	0.00100 M	0.00100 M	0.186
	07/29/03	0.00500 M	0.0485	0.00500 M	0.00500 M	0.00520	0.00100 M	0.000200 M	0.00500 M	0.00500 M	0.0148
	10/28/03	0.00451	0.130	0.00100 M	0.00703	0.0150	0.00590	0.000200 M	0.00100 M	0.00100 M	0.0382
	01/29/04	0.00456	0.162	0.00100 M	0.00888	0.0180	0.00797	0.000200 M	0.00100 M	0.00100 M	0.0495

TABLE 4
GROUNDWATER ANALYTICAL - TOTAL METALS
 Kinder Morgan Liquid Terminals LLC
 Linnton Terminal
 Portland, Oregon

Sample ID	Sample Date	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Lead (mg/L)	Mercury (mg/L)	Selenium (mg/L)	Silver (mg/L)	Zinc (mg/L)
MW-15	01/31/02	0.00951	0.262	0.00100 M	0.0224	0.0355	0.0133	0.000200 U	0.0011	0.00100 U	0.0936
	04/24/02	NA	NA	NA	NA	NA	0.0754	NA	NA	NA	NA
	07/30/02	NA	NA	NA	NA	NA	0.2270	NA	NA	NA	NA
	10/29/02	NA	NA	NA	NA	NA	0.0190	NA	NA	NA	NA
	01/29/03	0.0113	0.299	0.00100 M	0.0329	0.0464	0.0197	0.000200 M	0.00100 M	0.00100 M	0.142
	04/29/03	0.00359	0.0986	0.00100 M	0.00965	0.0109	0.00529	0.000200 M	0.00100 M	0.00100 M	0.0331
DUP	04/29/03	0.00322	0.0842	0.00100 M	0.00894	0.00905	0.00409	0.000200 M	0.00100 M	0.00100 M	0.0288
	07/29/03	0.0361	1.34	0.0500 M	0.0858	0.145	0.0798	0.000200 M	0.0500 M	0.0500 M	0.553
DUP	07/29/03	0.0239	0.765	0.00500 M	0.0538	0.0971	0.0492	0.000200 M	0.00500 M	0.00500 M	0.274
	10/28/03	0.0135	1.57	0.00100 M	0.0466	0.0792	0.0155	0.000200 M	0.00246	0.00100 M	0.302
	01/29/04	0.00322	0.0942	0.00100 M	0.00874	0.00883	0.00374	0.000200 M	0.00100 M	0.00100 M	0.0288
MW-16	02/01/02	0.116	0.354	0.00100 M	0.0465	0.0508	0.0312	0.000200 U	0.00100 M	0.00100 M	0.144
	04/25/02	NA	NA	NA	NA	NA	0.00998	NA	NA	NA	NA
	07/30/02	NA	NA	NA	NA	NA	0.120	NA	NA	NA	NA
DUP	07/30/02	NA	NA	NA	NA	NA	0.126	NA	NA	NA	NA
	11/27/02*	0.120	3.69	0.00100 U	0.610	0.546	0.323	0.000265	0.00100 U	0.00100 U	1.40
	01/28/03	0.0908	0.104	0.00100 M	0.00704	0.00652	0.00702	0.000400 M	0.00100 M	0.00100 M	0.0216
DUP	01/28/03	0.0891	0.135	0.00100 M	0.0121	0.0116	0.0106	0.000400 M	0.00100 M	0.00100 M	0.0367
	04/29/03	0.0895	0.0885	0.00100 M	0.00696	0.00764	0.00828	0.000200 M	0.00100 M	0.00100 M	0.0247
	07/29/03	0.116	5.83	0.100 M	0.718	0.764	0.466	0.000854	0.100 M	0.100 M	2.18
	10/28/03	0.112	0.397	0.00100 M	0.0498	0.0511	0.0355	0.000200 U	0.00100 M	0.00100 M	0.130
MW-17	01/31/02	0.00574	0.209	0.00100 U	0.00604	0.00954	0.00374	0.000200 U	0.00100 U	0.00100 U	0.0242
	04/24/02	NA	NA	NA	NA	NA	0.0106	NA	NA	NA	NA
	07/30/02	NA	NA	NA	NA	NA	0.0801	NA	NA	NA	NA
	10/30/02	NA	NA	NA	NA	NA	0.115	NA	NA	NA	NA
	01/29/03	0.00858	0.161	0.00100 M	0.0116	0.0177	0.0106	0.000200 M	0.00100 M	0.00100 M	0.0558
	04/29/03	0.0109	0.133	0.00100 M	0.00694	0.0110	0.00589	0.000200 M	0.00117	0.00100 M	0.0358
DUP	04/29/03	0.0119	0.148	0.00100 M	0.00738	0.0120	0.00679	0.000200 M	0.00124	0.00100 M	0.0417
	07/29/03	0.0338	0.477	0.00500 M	0.0461	0.0865	0.0465	0.000200 M	0.00500 M	0.00500 M	0.218
DUP	07/29/03	0.0213	0.203	0.00500 M	0.0170	0.0311	0.0139	0.000200 M	0.00500 M	0.00500 M	0.0733
	10/28/03	0.0308	0.820	0.00359	0.0802	0.164	0.0757	0.000200 M	0.00141	0.00100 M	0.401
	01/29/04	0.00429	0.125	0.00100 M	0.00510	0.00895	0.00484	0.000200 M	0.00100 M	0.00100 M	0.0295

TABLE 4
GROUNDWATER ANALYTICAL - TOTAL METALS
Kinder Morgan Liquid Terminals LLC
Linnont Terminal
Portland, Oregon

Sample ID	Sample Date	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Lead (mg/L)	Mercury (mg/L)	Selenium (mg/L)	Silver (mg/L)	Zinc (mg/L)
MW-18	04/25/02	NA	NA	NA	NA	NA	0.0362	NA	NA	NA	NA
DUP	04/25/02	NA	NA	NA	NA	NA	0.0294	NA	NA	NA	NA
	07/29/02	NA	NA	NA	NA	NA	0.0094	NA	NA	NA	NA
	10/30/02	NA	NA	NA	NA	NA	0.0460	NA	NA	NA	NA
	01/29/03	0.00255	0.0930	0.00100 M	0.00340	0.00593	0.00269	0.000200 M	0.00100 M	0.00100 M	0.0178
	04/29/03	0.00935	0.329	0.00100 M	0.0248	0.0363	0.0230	0.000200 M	0.00100 M	0.00100 M	0.118
	07/30/03	0.0386	0.758	0.00500 M	0.0734	0.121	0.0655	0.000200 M	0.00500 M	0.00500 M	0.342
	10/29/03	0.0348	0.781	0.00100 M	0.0787	0.132	0.0694	0.000200 M	0.00100 M	0.00100 M	0.364
	01/30/04	0.00295	0.159	0.00100 M	0.00540	0.00916	0.00384	0.000200 M	0.00100 M	0.00100 M	0.0284
MW-20	05/01/03	0.00887	0.0290	0.00100 M	0.00156	0.00213	0.00230	0.000200 M	0.00100 M	0.00100 M	0.00834
	07/30/03	0.0149	0.107	0.00500 M	0.0131	0.0226	0.00896	0.000200 M	0.00500 M	0.00500 M	0.0442
MW-21	05/01/03	0.00571	0.108	0.00100 M	0.0123	0.0237	0.0297	0.000200 M	0.00100 M	0.00100 M	0.0641
	07/30/03	0.0119	0.120	0.00500 M	0.0134	0.0621	0.0269	0.000200 M	0.00500 M	0.00500 M	0.0467
MW-22	05/01/03	0.00377	0.0146	0.00100 M	0.00100 M	0.00200 M	0.00100 M	0.000200 M	0.00100 M	0.00100 M	0.00500 M
	07/30/03	0.0148	0.114	0.00500 M	0.0143	0.0195	0.0121	0.000200 M	0.00500 M	0.00500 M	0.0493
	10/29/03	0.00751	0.270	0.00100 M	0.0172	0.0354	0.0193	0.000200 M	0.00100 M	0.00100 M	0.0924
	01/30/04	0.00100 M	0.0116	0.00100 M	0.00105	0.00200 M	0.00100 M	0.000200 M	0.00100 M	0.00100 M	0.00575
RW-1	11/26/02*	0.0168	0.183	0.00100 U	0.00852	0.01990	0.00798	0.000200 U	0.00100 U	0.00100 U	0.0868
RW-2	11/26/02*	0.00760	0.206	0.00385	0.0104	0.0226	0.0105	0.000200 U	0.00100 U	0.00100 U	0.0795
RW-3	11/26/02*	0.00444	0.132	0.00100 U	0.00276	0.00711	0.00270	0.000200 U	0.00133	0.00100 U	0.0129

NOTES:

Total Metals analyzed by USEPA Method 6000/7000 Series Method

mg/l = Milligrams per liter

NA = Not Analyzed

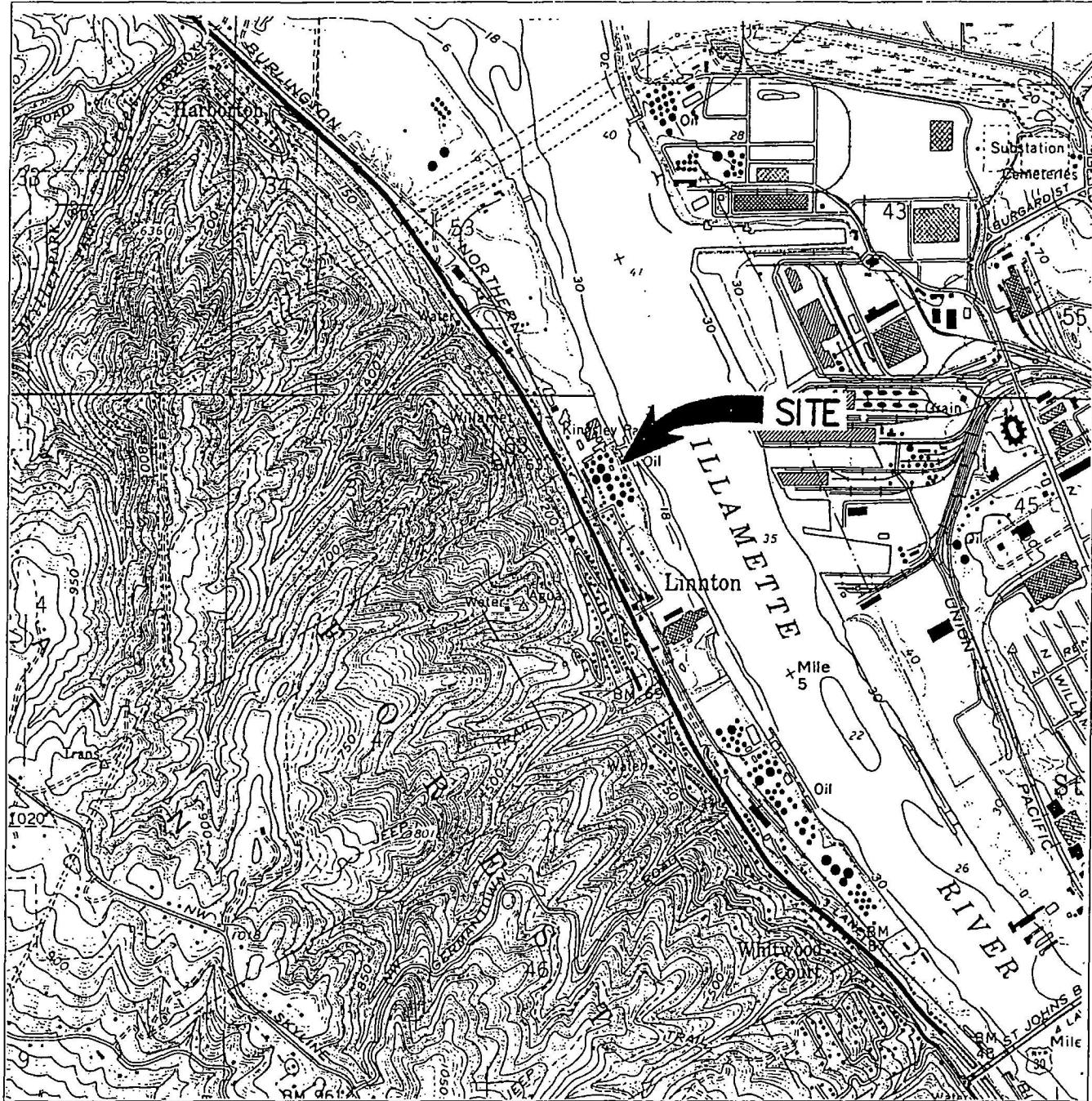
J = Estimated Value

U = Analyte included in the analysis but not detected above laboratory method detection limits (MDLs)

M = Analyte included in the analysis but not detected above laboratory method reporting limits (MRLs)

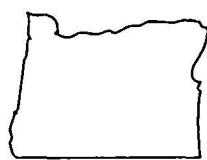
Bold Face Font = Analyte detected above the MRLs

* = Additional RI Sampling



REFERENCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP
LINNTON, OREGON, 1961
PHOTOREVISED 1984

SCALE 1 : 25,000



QUADRANGLE LOCATION

North

FIGURE 1

SITE LOCATION MAP

Kinder Morgan Liquid Terminals LLC - Linnton Terminal
11400 NW St. Helens Road
Portland, Oregon

PROJECT NO. PTKM-001-3.0001	DRAWN BY CRF
FILE NO.	PREPARED BY CRF 11/13/03
REVISION NO.	REVIEWED BY



